## **REMARKS**

Claims 1-8, 10, 11 and 13-16 are pending in the current application. Claims 1-8, 10, 11, and 13-16 currently stand rejected. Reconsideration and withdrawal of the current rejections is earnestly solicited in light of the following remarks.

## Claim Rejections – 35 U.S.C. § 102

Claims 1-8, 10, 11 and 13-16 stand rejected under 35 U.S.C. § 102(e) as being anticipated by US Pat 7,200,541 to Kropaczek et al. ("Kropaczek"). Applicants respectfully traverse this rejection for the reasons detailed below.

With regard to claim 1, the Examiner alleges that Kropaczek discloses each and every element of this claim, including assigning "fuel bundle categories to fuel bundle positions in the graphical representation to create a *template*" such that "only a fuel bundle matching the assigned fuel bundle categories to the fuel bundle positions be allowed to be loaded in the fuel bundle position." Applicants respectfully submit that Kropaczek is directed to optimization of *fuel bundle position for loading* in a nuclear core. *See* Col. 2, Il. 15-22; FIG. 12. Kropaczek does not address the creation of a core template or categories therein. Rather, the optimization method in Kropaczek allows fuel bundles to be placed in and shifted among any final position in the nuclear core, *regardless of fuel bundle type*. *See* Col. 13, Il. 55-65 ("an exposed bundle may be swapped with a fresh fuel bundle"). This is specifically forbidden by the template recited in claim 1. Where Kropaczek does discuss constraints, it is silent regarding constraints based on a template or assigned fuel bundle categories therein. *See* Col. 6, Il. 46-60; Col. 15, Il. 26-29. Thus Kropaczek does not generate the template of claim 1 or deal with the fuel bundle type categories therein.

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Because Kropaczek fails to disclose or suggest each and every element of claim 1,

Kropaczek cannot anticipate or render obvious claim 1. Claims 2-8, 10, 11, and 13-16 are

allowable at least for depending from an allowable base claim. Withdrawal of the rejection

under 35 U.S.C. § 102(e) to claims 1-8, 10, 11, and 13-16 is respectfully requested.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the

objections and rejections and allowance of each of claims 1-8, 10, 11 and 13-16 in connection

with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present

application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone

number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future

replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any

additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension

of time fees.

Respectfully submitted,

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By

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